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In the Supreme Court of the United States

OCTOBER TERM, 1962

No. 906

DAVID ATLAS,
PETITIONER,

v.

EASTERN AIRLINES, INCORPORATED and THE BENDIX CORPORATION,
RESPONDENTS.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

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Petitioner, David Atlas, prays that a writ of certiorari issue to review the judgment of the United States Court of Appeals for the First Circuit entered in the above-entitled case on December 11, 1962.

Opinions Below

The District court rendered an opinion which has not as yet been published but is printed on pages 76-80 of the

Record Appendix.[1] The opinion of the Court of Appeals for the First Circuit has been published in 311 F.2d 156 (1962) and is printed as Appendix A to the present petition, the judgment being Appendix B.

Jurisdiction

The judgment of the Court of Appeals was entered on December 11, 1962. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254 (1).

Questions Presented for Review

1. Does an incomplete demonstration to newspapermen of an experimental model of an invention without disclosing to them how the invention is constructed or works, constitute public use so as to invalidate a patent?

2. Is it proper for a court to grant summary judgment for patent invalidity on the basis of public use where there is evidence that experimental use was still being made of the invention after the date of such alleged public use?

3. May a court deprive a plaintiff of a jury trial in a patent case by granting summary judgment for patent invalidity on the basis of public use, where the affidavits and attached exhibits submitted by the respondents forming the sole support for the judgment do themselves raise important questions of fact, namely, (a) whether there was any actual use and (b) whether any such use was experimental?

[1] A Record Appendix, in two volumes, with continuous paging, was filed in the court below. A certified copy and 9 additional copies of this appendix have been filed in accordance with Rule 21 of this court. References to the appendix are designated "R".

4. In an action seeking an award of damages to be made by a jury in a patent infringement case, may a court grant summary judgment for patent invalidity because of public use upon a motion supported by affidavits of witnesses shown in prior depositions to be biased against the plaintiff, and whose testimony in such prior depositions concerning other critical issues in the case was contradicted by testimony of other witnesses?

Statute and Rule Involved

The statute involved in the decision of the above questions is 35 U.S.C. 102(b): "A person shall be entitled to a patent unless—b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country more than one year prior to the date of the application for patent in the United States." The full text of 35 U.S.C. 102 is set forth in Appendix C.

The Rule involved in the decision of the above questions is Summary Judgment, Rule 56 of the Federal Rules of Civil Procedure, particularly section c: "The motion shall be served at least 10 days before the time fixed for the hearing. The adverse party prior to the day of hearing may serve opposing affidavits. The judgment sought shall be rendered forthwith if the pleadings, depositions, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment. A summary judgment interlocutory in character may be rendered on the issue of liability alone, although there is a genuine issue as to the amount of damages." The full text of Rule 56, as in effect when the decisions below were made is set forth in Appendix D.[2]

[2] Rule 56 was amended January 21, 1963.

Statement of the Case

The jurisdiction of the trial court was invoked under 28 U.S.C. § 1338 and the Patent Laws of the United States.

This is a patent infringement suit where the petitioner asks for $1,000,000 damages and a jury trial.

The petitioner seeks review of the judgment of the First Circuit Court of Appeals which affirmed a summary judgment for the respondents entered January 8, 1962, by the District Court of Massachusetts and affirmed the denial of the petitioner's motion for rehearing entered April 9, 1962.

The patents in suit are David Atlas, No. 2,656,531, and the reissue of said patent, Re. No. 24,084, both entitled "Device To Permit Radar Contour Mapping of Rain Intensity". (R 9-21)

The invention is important in the field of air transportation. It provides the pilot of an airplane with an instantaneous map in contour form of the location of the high and low intensities of water particles within a storm. Such a contour map enables the pilot to direct his flight course through the less dense areas of a storm and avoid the turbulent or dangerous areas. Prior radar sets displayed merely the outer shape of a storm and gave no internal discrimination. A plane equipped with an ordinary radar set would thus be compelled to fly great distances around the storm, since there would be no way of finding a safe passage through the storm, while the rain intensity contour map of the petitioner's invention provides the pilot with a means for flying through the storm and maintain the safety of aircraft and passengers.

The respondent, The Bendix Corporation, has admitted manufacture and sale by it as of April 14, 1960, of over $14,000,000 worth of radar devices which permit contour maping of rain intensity (R 27-29), and which the petitioner claims infringes his patents.

After three years of extensive discovery devoted to defenses *other* than the one at issue, the respondents filed a motion for summary judgment (R 29-38), supported by two substantially identically-worded affidavits, one of Robert W. Ayer (R 38-69) and the other of Frank White (R. 69-75). These affidavits, with the attached exhibits, formed the sole basis for the District Court's grant of summary judgment for patent invalidity on the ground that a certain airplane flight conducted by Ayer and White on or about August 12, 1949, on behalf of American Airlines pursuant to a development contract with the United States Navy, constituted a public use more than one year prior to September 20, 1950, the filing date of the petitioner's patent.

Neither of these affidavits described the equipment used on the flight, to which newspapermen were invited, except for the following identical statements: "All of the radar equipment which we had developed at American Airlines on the said American Airlines-Navy contract was on board the aircraft and was functioning at that time and during that flight. More specifically as it bears on the subject matter of the Atlas patents No. 2,656,531 and Reissue No. 24,084 (which I have read), we had on board and demonstrated to the press the so-called weather radar contour mapping device which we had previously built and proved operational." (R 39-40, 70). The only other reference to the identity of the equipment allegedly used by the affiants is to Exhibits B1 and B2 (R 67-69) attached to the motion, which are portions of a deposition of David Atlas, the petitioner, taken by the respondents wherein reliance is apparently placed on the following testimony:

> "Q. Isn't it true, Dr. Atlas, that you never built the simplified version?
>
> A. That is right.
>
> Q. And that American Airlines are the ones that built it?

A. Yes.

Q. And that you knew this over a year before you filed your patent application?

A. Alright, yes. So? It was such an obvious thing to do that it was hardly worth while."

Both the Ayer and White affidavits state that *no* storm contours appeared on the radar set during the flight. "As things turned out, we did not encounter a thunderstorm on that particular flight and therefore we were unable to show the presence of an actual 'live' thunderstorm contour." Instead, *photographs* of storm contours were shown to the reporters. (R 40). The mode of operation of the invention was not explained to the reporters.

However, there were newspaper clippings attached as exhibits to these affidavits (R 56-67) that reported on the flight, and which *contradict* the Ayer and White affidavits as to whether any thunderstorms were encountered.

This is significant since Ayer and White explain the *absence of contours* as being due to the absence of thunderstorms. It is obvious that if thunderstorms were encountered, the absence of contours could only mean either failure to use the equipment, lack of the equipment, or inoperativeness of the equipment. Thus one exhibit states, "Through the thunderstorms of Friday, Robert Ayer, radar expert for the Company, navigated the plane between here and Boston with a heavy precipitation showing so plainly on the radar scopes, clear of all ground clutter, that he was able to dodge the rough going" (R 58).

Another exhibit states: "Those making the demonstration flight with the crew of the Gamma were able to see the entire shape of a storm south of Boston several miles ahead of the plane and watched the pilot navigate to avoid areas of turbulence" (R 61).

Other portions of the exhibits attached to the affidavits

refer to the *experimental nature* of the equipment. One exhibit states, "Among other things, the Gamma is just ending a three-year test of airborne radar for the Navy . . . When they get this type of electronics refined and truly harnessed for airlines' use, it will guide pilots out of dangerous storm areas and icing condition" (R 57). Another report states, "Pending manufacture of the device, the flagship Gamma, as the experimental plane is known, is to be flown to the company's base at Tulsa, Oklahoma, to be remodified and renamed to serve as a regular passenger liner" (R 59). Still another exhibit states, "Engineers of American Airlines, now finishing a three-year program of experimentation with airborne radar for the Navy, called the radar devices and methods developed closer than ever before to commercial application" (R 60). Another exhibit advises that "because the work was being done under contract for the Navy, the airlines refused to disclose the program until yesterday, when the Gamma made its last flight [the flight in question] before being transformed back into a commercial passenger plane" (R 64).

Prior to the hearing on the motion for summary judgment, White had already testified that after he left American Airlines, the device allegedly used on the flight by American Airlines was the subject of further testing and evaluation by himself personally on behalf of the United States Navy (R 112-113).[2]

The petitioner filed at the hearing an affidavit alleging in part that the flight was "private and experimental" (R 83-75).

In conjunction with the motion for a re-hearing, the petitioner offered further affidavits (R 82-85) to which were attached certain Navy reports (R 86-104) that indicate

[2] The depositions of both White and Ayer were taken *before* respondents ever alleged that the flight in issue took place and that it was a public use.

the belief of the Navy that further testing of the airline's radar set was necessary, and that the Navy did arrange for such further testing over a period extending to a date after the petitioner's patent application was filed.

Reasons for Granting the Writ

Review by this Court is warranted because of the conflict of the decision of the Court of Appeals for the First Circuit with applicable decisions of both this court and other Courts of Appeals, and also because the Court of Appeals for the First Circuit has so far sanctioned a departure from the accepted and usual course of summary judgment proceedings as to call for an exercise of this Court's power of supervision, as explained below.

1. The issue of whether a demonstration is a public use was decided by the Court of Appeals for the First Circuit in this present case in a manner which conflicts with that of the Court of Appeals for the Third Circuit. In the Third Circuit case of *National Tube Co.* v. *Steel and Tubes Inc.*, 90 F.2nd. 52, 54, (1937) the Court held there that a demonstration without disclosure of the invention *did not* constitute public use, saying in part, "The showing of these pieces of tube to Mr. Simmons and the demonstration of their fitness for his use without disclosing the process did not amount to public use". In the present case the Court below found the demonstration flight to be a public use, even though the equipment was experimental and the demonstration incomplete for lack of contours, the most important feature of the petitioner's invention.

2. The ruling by the Courts below that experimental use of the invention after the date of the alleged public use is of no significance has extended the case law in direct conflict with the decisions of the Court. As stated in the case of *Electric Storage Battery Co.* v. *Shimadzu*, 307 U.S. 5, 11

(1939), this Court held that "a mere experimental use is not the public use defined by the Act, but a single use for profit not purposely hidden is." This latter case is an extension of the doctrine of *Elizabeth* v. *Pavement Co.*, 97 U.S. 126 (1877), in which it is stated, "It is immaterial whether the experimental use disclosed a necessity for improvement or disclosed no such necessity; and it is also immaterial whether the use was conducted with secrecy or not. It may indeed have been held in the open air and have continued every day for several years and have been known to hundreds of persons and have incidentally inured to the profit of the user and of the public, and still not be a public use within the meaning of the statute, if the nature of the invention was such that only long-continued outdoor use could show whether the invention possessed utility, or show in what respects, if any it required to be improved" (p 134).

The Court of Appeals chose to ignore the petitioner's argument as to further experimentation by stating: "However, the rule is that an invention is deemed functional for public use purposes when it can perform the general function for which it has been developed, even though the device might later be refined," citing *Hall* v. *MacNeale*, 107 U.S. 90 (1882) which deals with a safe rather than a complex invention as the one in issue. Inasmuch as there is evidence of experimentation with the invention in the present case continuing long after the alleged public use, and since there is evidence that one of the affiants *himself* participated in such experimentation, there is a genuine issue raised as to whether the flight itself was or was not experimental, which issue should not be resolved in summary judgment proceedings but should be resolved by the jury.

3. The decision of the Court below is in direct conflict with the intention and meaning of the Court's recent decision in *Poller* v. *Columbia Broadcasting System*, 368 U.S. 464 (1962), which deals with the use of affidavits in a

summary judgment proceeding, in view of *Smith & Griggs Manufacturing Co. v. Sprague*, 123 U.S. 249, 264 (1877), which holds that public use evidence must be "full, unequivocal and convincing" to invalidate a patent. In the *Poller* case, this Court stated, "We believe that summary procedures should be used sparingly in complex anti-trust litigation where motive and intent play leading roles, the proof is largely in the hands of the alleged conspirators and hostile witnesses thicken the plot. It is only when the witnesses are present and subject to cross-examination that their credibility and the weight to be given their testimony can be appraised. Trial by affidavit is no substitute for trial by jury which, so long has been the hall-mark of 'even-handed justice' " (p. 473).

The affiant White indicated a strong feeling of resentment and bias towards the plaintiff (R 114-115) in his deposition taken by the respondents prior to the summary judgment proceedings and in which the issue of public use was not raised. Ayer also stated in his deposition that extensive distribution had been made of a particular report crucial to another defense in this case, (R 115-121), which was contradicted by Warfield (R 124-127, 134), a Navy officer whose deposition had also been taken before the hearing.

Further, the exhibits attached to the Ayer and White affidavits themselves raise substantial questions of fact both as to whether the flight was experimental and as to what radar equipment was on board, i.e. was it used or was it working or was it on board at all. A controversy may arise from the face of moving papers, *Braniff v. Jackson Avenue Gretna Ferry*, 280 F.2d 523, (CA-5) so as to bar summary judgment.

Also, both the Court of Appeals and the District Court labeled the plaintiff's affidavit in opposition to the motion

(R 73-75) as being insufficient to raise the issue of experimental use by merely stating the flight in question to be "private and experimental". Yet both the Court of Appeals and the District Court were willing to accept the petitioner's equally conclusionary statement in his deposition that American Airlines had used the "simplified version" of his invention as sufficient basis for identifying the radar equipment used on the flight in question. It is submitted that this is unfair to the petitioner, for if the petitioner's affidavit is to be deemed conclusionary, then not only is his testimony relied on by the respondents also conclusionary, but also the statements in the Ayer and White affidavits that the radar contour mapping device had been previously "proved operational" (R 40, 70)

Accordingly, there was no clear and convincing evidence of public use presented, as required by the rule of *Smith & Griggs Manufacturing Co.* v. *Sprague* (supra)

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Appendix A

OPINION OF THE

United States Court of Appeals
For the First Circuit

December 11, 1962.

HARTIGAN, *Circuit Judge*. This is an appeal from a judgment of the United States District Court for the District of Massachusetts entered January 8, 1962 granting defendants' motion for summary judgment and dismissing the complaint, and from the denial of plaintiff's motion for rehearing entered April 9, 1962.

Plaintiff-appellant, a resident of Massachusetts, brought an action against defendants-appellees, Delaware corporations, claiming damages for infringement of Atlas [plaintiff's] patent No. 2,656,531 and reissue patent No. Re 24,084. The original patent and the reissue relate to a "Device to Permit Radar Contour Mapping of Rain Intensity." This device—designed for use in airplanes—involves a method of directing radar transmission towards a storm area and estimating the degree of magnitude of storm intensities by the strength of echo signals returned by the water particles within the storm cloud. A pictorial map of the relative intensities of water particles within the storm area is furnished the pilot of a plane in the form of contours on the PPI scope of a radar set, thus enabling the pilot to direct his flight course through the less dense areas of the storm—avoiding the turbulent or dangerous areas.

Plaintiff apparently developed the device sometime in 1947 while employed as a meteorologist by the Air Material Command at Wilmington, Ohio. He filed his original application for a patent on September 12, 1950. The

patent was granted on October 20, 1953 and reissued on November 1, 1955.

In the court below, following extensive pre-trial discovery, defendants moved for summary judgment on the ground that the subject patents were invalid because the patented device had been fully described to the public in printed publications as early as three years in advance of the date that plaintiff applied for his patent. Alternatively, defendants contended that the subject device had been in "public use" more than one year prior to plaintiff's application and consequently that the action was barred under 35 U.S.C. § 102(b) which provides in pertinent part:

> "A person shall be entitled to a patent unless. . . (b) the invention was . . . in public use or on sale in this country, more than one year prior to the date of applications for patent in the United States. . . ."

The district court, after reviewing the various asserted instances of prior publications, held that none could be deemed so comprehensive or detailed so as to constitute a publication sufficient to render the subsequent grant of the patent invalid. *Wisconsin Alumni R. Foundation* v. *George A. Breon & Co.*, 85 F.2d 166 (8th Cir. 1936).

However, the district court held that there had in fact been a public use of the patented device more than one year prior to plaintiff's filing his patent application and, on this basis, granted defendants' motion for summary judgment.

The asserted instance of public use involved a flight by American Airlines on August 12, 1949,[1] on which a device comparable to the one subsequently patented by plaintiff was utilized and demonstrated. The record indicates that sometime after plaintiff had developed his device, Ameri-

[1] As noted above, plaintiff did not file for his patent until September 12, 1950.

can Airlines, under a contract with the Navy, had itself devised an instrument designed to permit radar contour mapping of storm areas. As noted by the district court, American Airlines' instrument differed technically from the device of plaintiff in that it utilized but two channels as opposed to the four which were found in plaintiff's instrument. However, this difference was not material since, as plaintiff admitted in his deposition, the two-channel variation "was such an obvious thing to do that it was hardly worth while." However, it is clear that both the two and four channel devices were designed to serve the identical function—that is to provide the pilot of an aircraft with a means of analyzing the internal discriminations within an area of turbulence as distinguished from merely being given a view of the general exterior shape of the storm—the apparent state of the art prior to the subject inventions.

The facts surrounding the asserted and critical instance of public use were described by the district court as follows:

> "After plaintiff had developed his device, the airline [American] made a so-called 'simplified version' of the device which it installed on a test plane along with other radar equipment which it was testing. . . . On August 12, 1949 American Airlines conducted a flight of this test plane for the purpose of demonstrating their latest developments in flight equipment to eight invited representatives of the press. Their version of the Atlas device was installed in the plane; it was shown in operation to the newsmen present. They were given an explanation of its purpose and usefulness and shown photographs of radar pictures of storm contours which would be produced on a radar screen by the use of the device. No actual storm was encountered during the demonstration flight, so that

the newsmen did not see the actual pictures produced in the presence of a storm."

Plaintiff argues that the flight of August 12, 1949 should not be regarded as a "public use"—invalidating plaintiff's patent—because the flight was of an "experimental" nature and consequently an exception to the ordinary rule that public use one year before application invalidates a patent. The validity of plaintiff's contention presents the major issue on this appeal.

It is well settled that the policy consideration behind the "public use" rule is to stimulate a seasonable disclosure of new inventions within the framework of the patent laws. In *Pennock* v. *Dialogue*, 27 U.S. (2 Pet) 1 (1829), the Supreme Court stated that the public use provisions were aimed at preventing an inventor from holding back the secrets of his invention while concurrently exploiting it, and thereafter exchanging his knowledge for a legal monopoly when confronted with the possibility of competition. This policy was reiterated by the Court in *Andrews* v. *Hovey*, 123 U.S. 267, 274 (1887), aff'd on rehearing, 124 U.S. 694 (1888), where it was stated: "Its object was to require the inventor to see to it that he filed his application within [the statutory period] from the completion of his invention, so as to cut off all questions of the defeat of his patent by a use or sale of it by others more than [the statutory period] prior to his application. . . ."

An exception to the general principle of seasonable disclosure articulated in the "public use" provisions occurs in those situations where the use in question is of an experimental nature. *Electric Battery Co.* v. *Shimadzu*, 307 U.S. 5 (1939). This exception proceeds on the premise that an inventor, once he has conceived his invention, should be accorded sufficient time to perfect that invention and the time which elapses during this interim period should not be computed as part of the "one year" require-

ments of the "public use" statute. During the experimental period, the inventor may freely use his invention "for the purpose of testing the machine," *Smith and Griggs Mfg. Co.* v. *Sprague*, 123 U.S. 249, 256 (1887) or "in order to bring the invention to perfection" *Elizabeth* v. *Pavement Co.*, 97 U.S. 126, 134 (1877) without causing the statutory period relating to public use to run.

Neither the fact that the invention in question was used in public over a protracted period of time, *Elizabeth* v. *Pavement Co.*, *supra*, nor the fact that the owner may have derived some financial profit during the time that the device was so used, *Smith and Griggs Mfg. Co.* v. *Sprague*, *supra*, will negate the contention that the use was "experimental" where the facts indicate that the subject use was essentially an integral part of a bona fide program of experimentation. In short, to fall within the exception the use must be one "which may be properly characterized as substantially for purposes of experiment," *Smith and Griggs Mfg. Co.* v. *Sprague*, *supra*, at 256; regardless of its incidental features. And "as a general principle, any non-secret use of the completed and operative invention or discovery in its natural and intended way is a public use within the meaning of the statute." *Bourne* v. *Jones*, 114 F. Supp. 413, 419 (D.C.S.D.Fl. 1952), aff'd, 207 F.2d 173 (5th Cir. 1953), cert. den., 346 U.S. 897.

Where the validity of a patent is put in issue on the basis of a "public use" outside the statutory limit, the party asserting such use must offer evidence that "shall be clear, satisfactory, and beyond a reasonable doubt." *The Barbed Wire Patent*, 143 U.S. 275, 284 (1892). However, once a prima facie demonstration of the claimed use has been made, the inventor carries the burden of showing that the use was not of a functionally operative device, or was substantially used for experimentation or testing purposes and this must be demonstrated by strong and con-

vincing proof. *National Biscuit Co.* v. *Crown Baking Co.*, 105 F.2d 422 (1st Cir. 1939).

As noted above, the instant case comes to us with the trial judge having entered summary judgment against the inventor on the ground that the American Airlines' flight of August 12, 1949 constituted an instance of "public use" which was outside the alleviating exception of "experimental use." The case in this posture gives rise to the familiar principle that a reviewing court must view the evidence in the light most favorable to the party against whom the motion has been granted, according that party the full benefits of all favorable inferences that may be drawn from the evidence in determining whether there exists a genuine issue of material fact. *Manganaro* v. *De Laval Separator Co.*, decided November 1, 1962, F.2d (1st Cir.), and cases cited therein.

In support of its motion for summary judgment the defendants introduced two affidavits, one of Robert W. Ayer, assistant director of operational development for American at the time of the August 12, 1949 flight, and the other of Frank W. White, then assistant director of air navigation traffic control at American. Both Ayer and White had left the employ of American at the time they submitted the instant affidavits. Both had testified previously by depositions taken by the defendants.

In his affidavit, Ayer stated that during the years 1947-1949, he had been in supervisory charge of a group of engineers at American Airlines, one of whose specific objectives was to develop radar for commercial airline use. He indicated that his group performed most of the work in this field under a development contract with the United States Navy. Ayer stated that it was American's policy to publicize widely any information concerning airborne radar developments as soon as they were proved "operational." One of the means which was used to effectuate

this publicity was public demonstration to the press. Pursuant to this policy Ayer testified that in August 1949, American invited eight members of the New England area press to a public demonstration of the declassified airborne radar developments and a demonstration flight took place on August 12. Ayer's affidavit recited that "All of the radar equipment which we had developed at American Airlines . . . was on board the aircraft and was functioning at that time and during that flight. More specifically as it bears on the subject matter of the Atlas patents . . . we had on board and demonstrated to the press the so-called weather radar contour mapping device which we had previously built and proved operational."

Ayer was navigator of the plane which flew this flight. Ayer's affidavit incorporated various exhibits attached thereto consisting of newspaper stories—some of which were written by reporters who were on the flight.

White's affidavit also confirmed the fact that it was American's policy to widely publicize radar developments once they became operational and that incident to this policy, American utilized the August 12th flight to demonstrate the radar contour mapping device which had been "previously built and proved operational." White's affidavit concluded with the statement that "The . . . device which we demonstrated to the press on . . . August 12, 1949 was in working order and entirely operational."

The exhibits attached to and incorporated in the Ayer affidavit consisted of newspaper articles written by air-news-specialists. These fell into two categories. The first consisted of dispatches written during 1947 which indicated the extensive research activities relating to air-borne radar in which American had already engaged at that time. One of these articles related the writer's participation in an air-borne radar demonstration with the engineering staff of American Airlines in which the equipment was utilized for

a variety of purposes. One of the uses for which the equipment was being tested during the 1947 flight was "weather and traffic interpretation which gives the pilot an actual measuring rod of atmospheric conditions" so that the pilot "can see the dimensions and nature of a thunderstorm or an icing area. . . . In short, a major use of air borne radars is to provide the airman with atmospheric pattern flying."

The second series of articles were written by newsmen who participated in the demonstration flight of August 12. These articles confirmed the flight. In speaking of its purpose they stated typically "the improved radar can identify and analyze storms ahead, tell which part of the air will be turbulent and which part contains hailstones." The articles went on to point out that the equipment had been the subject of extensive testing,[2] both in the United States and in eastern Canada, and that the demonstration flight was the culmination of America's research program —evidenced by the fact that the test plane used on the August 12 flight was to be reconverted to a commercial airliner immediately following the demonstration flight.

In one of the exhibits, Ayer is quoted as stating after the flight that "airborne radar is now probably as fully developed as any other aircraft instrument was at the time of its adoption."

Finally, both Ayer and White testified in their affidavits that the device demonstrated to the press on the August 12 flight was the only version of the device which American Airlines ever manufactured.

Plaintiff submitted an affidavit in opposition to defend-

[2] White testified in his deposition as to the extent of the research activities leading up to the flight of August 12, 1949: "Do you know whether or not the contour circuitry . . . [of American] . . . produced contours? A. Yes, I know that it did. Q. How were you sure that it did? A. We used it in several hundred hours of flight operation in probing thunder storms to determine the results that could be obtained from using contour circuitry."

ants' motion for summary judgment which—outside of characterizing the flight as "private and experimental"—did nothing to rebut the "public use" nature of the August 12 flight. And, it was in this posture that the case was submitted to the district judge on motion for summary judgment.

We do not believe that under the facts of the record the plaintiff's conclusionary description of the flight as "experimental" was sufficient to raise a genuine issue of material fact so as to forestall summary judgment. See, *Minnesota Mining & Mfg. Co.* v. *United States Rubber Co.*, 279 F.2d 409 (4th Cir. 1960); *Runkle* v. *Nong Kimng*, 266 F.2d 689 (D.C. Cir. 1959); *Meyers* v. *District of Columbia*, 17 F.R.D. 216 (D.C.D.C. 1955). Rather we believe that the record clearly indicates that the flight of August 12 showed the American Airlines' device to be a functionally successful embodiment of the instrument which American Airlines had set out to produce at least as early as 1947 and which, after an extensive program of experimentation and research, the company was able to successfully demonstrate to the public at large. A device so successful that it was the only type of device which the company ever produced.

The thrust of plaintiff's argument in this court is that the type of device represented by the American Airlines instrument had not been fully perfected and was still the subject of further refinements. However, the rule is that an invention is deemed functional for public use purposes when it can perform the general function for which it has been developed, even though the device might later be refined. *Hall* v. *MacNeale*, 107 U.S. 90 (1882); *National Biscuit Co.* v. *Crown Baking Co.*, 105 F.2d 422 (1st Cir. 1939); *Monroe* v. *Bresee*, 239 F. 727 (1917).

We fully recognize that mere reduction to practice, see *Corona Co.* v. *Doran Corp.*, 276 U.S. 358 (1928), is not the

test and that in the appropriate case "experiments may continue in an attempt to further perfect the device beyond the requirement of a reduction to practice." *General Motors Corp. v. Bendix Aviation Corp.*, 123 F. Supp. 506, 521 (D.C.N.D. Ind. 1954). However, in the instant case, so far as experimental use is concerned, we fully agree with the district court that: "There was no question involved of seeing whether the device worked or how it could be improved. Such experimentation as was to be made had been completed. The sole purpose of the flight was to show to the press and through them to the general public new developments in radar equipment which had been proved operational."

Plaintiff also urges here that the district court erred in granting the motion for summary judgment because the record indicated that the credibility of the affiants, Ayer and White, was in serious question. Plaintiff bases this contention on the similarity in language between their two affidavits and implies a sinister collusion. Defendants' counsel candidly admitted at oral argument that the language was similar because he prepared both affidavits based on the independent recollection of the affiants. Be that as it may, counsel for plaintiff did not seek to raise this issue below nor did he attempt to cross-examine the affiants in this regard at the taking of depositions. Consequently he cannot be heard now. *Thomas v. Mutual Benefit Health & Accident Ass'n*, 220 F.2d 17 (2nd Cir. 1955); *Topp-Cola Company v. Coca-Cola Company*, 185 F. Supp. 709 (D.C.S.D.N.Y. 1960).

Finally, we cannot say that the district judge's refusal to entertain a petition for rehearing constituted an abuse of discretion in view of the material contained in plaintiff's supplementary affidavits. *George P. Converse & Co. v. Polaroid Corporation*, 242 F.2d 116 (1st Cir. 1957).

Judgment will be entered affirming the judgment of the district court.

Appendix B

JUDGMENT

December 11, 1962

This cause came on to be heard from the United States District Court for the District of Massachusetts and was argued by counsel.

Upon consideration whereof, It is now here ordered adjudged and decreed as follows:

The judgment of the District Court is affirmed.

by the Court:
(s) ROGER A. STINCHFIELD
Clerk

Approved:
(s) PETER WOODBURY
Ch. J.

Appendix C

35 USC 102

Conditions for patentability—Novelty and loss of right to patent.—A person shall be entitled to a patent unless—

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or

(c) he has abandoned the invention, or

(d) the invention was first patented or caused to be patented by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application filed more than twelve months before the filing of the application in the United States, or

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or

(f) he did not himself invent the subject matter sought to be patented or

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other. (July 19, 1952, c. 950, § 1, 66 Stat. 797.)

Appendix D

RULE 56. SUMMARY JUDGMENT

(a) *For Claimant.* A party seeking to recover upon a claim, counterclaim, or cross-claim or to obtain a declaratory judgment may, at any time after the expiration of 20 days from the commencement of the action or after service of a motion for summary judgment by the adverse party, move with or without supporting affidavits for a summary judgment in his favor upon all or any part thereof.

(b) *For Defending Party.* A party against whom a claim, counterclaim, or cross-claim is asserted or a declaratory judgment is sought may, at any time, move with or without supporting affidavits for a summary judgment in his favor as to all or any part thereof.

(c) *Motion and proceedings Thereon.* The motion shall be served at least 10 days before the time fixed for the hearing. The adverse party prior to the day of hearing may serve opposing affidavits. The judgment sought shall be rendered forthwith if the pleadings, depositions, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law. A summary judgment, interlocutory in character, may be rendered on the issue of liability alone although there is a genuine issue as to the amount of damages.

(d) *Case Not Fully Adjudicated on Motion.* If on motion under this rule judgment is not rendered upon the whole case or for all the relief asked and a trial is necessary, the court at the hearing of the motion, by examining the pleadings and the evidence before it and by interrogating counsel, shall if practicable ascertain what material facts exist without substantial controversy and what material facts are actually and in good faith controverted. It shall

thereupon make an order specifying the facts that appear without substantial controversy, including the extent to which the amount of damages or other relief is not in controversy, and directing such further proceedings in the action as are just. Upon the trial of the action the facts so specified shall be deemed established, and the trial shall be conducted accordingly.

(e) *Form of Affidavits; Further Testimony.* Supporting and opposing affidavits shall be made on personal knowledge, shall set forth such facts as would be admissible in evidence, and shall show affirmatively that the affiant is competent to testify to the matters stated therein. Sworn or certified copies of all papers or parts thereof referred to in an affidavit shall be attached thereto or served therewith. The court may permit affidavits to be supplemented or opposed by depositions or by further affidavits.

(f) *When Affidavits are Unavailable.* Should it appear from the affidavits of a party opposing the motion that he cannot for reasons stated present by affidavit facts essential to justify his opposition, the court may refuse the application for judgment or may order a continuance to permit affidavits to be obtained or depositions to be taken or discovery to be had or may make such other order as is just.

(g) *Affidavits Made in Bad Faith.* Should it appear to the satisfaction of the court at any time that any of the affidavits presented pursuant to this rule are presented in bad faith or solely for the purpose of delay, the court shall forthwith order the party employing them to pay to the other party the amount of the reasonable expenses which the filing of the affidavits caused him to incur, including reasonable attorney's fees, and any offending party or attorney may be adjudged guilty of contempt.